BY THE COMPTROLLER GENERAL

Report To The Congress

OF THE UNITED STATES

Changes Needed In U.S. Assistance To Deter Deforestation In Developing Countries

AID's forestry assistance program has tended to overestimate developing-country commitments and capabilities to carry out forest conservation projects, thus, contributing to the difficulties some countries are having in implementing AID projects. Moreover, current and planned projects do not focus enough on alleviating the principal cause of forest destruction--the subsistence farmers' clearing of forests for more pastures, farmland, fuelwood, and livestock fodder.

To help overcome these problems, GAO believes that AID must

- avoid designing projects which propose to do more in forestry and natural resource conservation than developing countries are capable of doing, and
- --better implement established strategies to integrate forestry assistance with other development programs.

The Departments of State and the Treasury should request that international organizations, in designing their projects, give more consideration to the impact on subsistence farmers.





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COMPTROLLER GENERAL OF THE UNITED STATES WASHINGTON D.C. 20548

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To the President of the Senate and the Speaker of the House of Representatives

This report discusses the problem of deforestation in developing countries. We found that the principal cause of deforestation—subsistence farmers' clearing of forests for pastures, farmland, fuelwood and livestock fodder—is not being adequately addressed in U.S. assistance activities. The report also discusses some of the problems encountered thus far in providing forestry assistance.

We are sending copies of this report to the Director, Office of Management and Budget; the Administrator, Agency for International Development; and the Secretaries of the Treasury and State.

Acting Comptroller General of the United States

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and approved forestry assistance projects totaling \$481 million, excluding commercial forestry projects. (See p. 4.) GAO visited five developing countries which were carefully selected to achieve balanced regional coverage of developing-country deforestation problems and donor programs in Asia, Africa, and Latin America.

HOST-COUNTRY COMMITMENT AND CAPABILITY IS INSUFFICIENT

The forestry projects which AID and other donors approved were experiencing delays because host-government forest service organizations have been unable to obtain the necessary financial and political commitments from their governments to

- --effectively reform existing land-use practices and, in some cases, related laws and policies and
- --fund required contributions and recurring budgetary expenses for forestry projects.

The developing countries visited by GAO were attempting to solve their problems and were working with AID to solve project implementation problems. The very real economic, political, and social problems, however, limit the ability of these countries to ease the agrarian population pressures on the mountains, hillsides, and other marginal lands not suited to intense cultivation and grazing. Other studies show that AID's program may be having similar problems elsewhere because forestry and natural resource conservation have been, and continue to be, a low priority for most developing countries, which are beset with higher-priority economic and agriculture problems.

AID should adjust its project planning to reflect the realities of limited host-government commitment to forestry problems. Current project implementation and sustainability by host-governments is uncertain. In two cases, AID has withheld the disbursement of project funds because countries have been slow in complying with project conditions and covenants.

FORESTRY PROJECTS SHOULD BE INTEGRATED WITH DONOR AGRICULTURAL PROGRAMS

GAO questions the allocation of much of the AID forestry project assistance for building fledgling forest service organizations which do not have the necessary (1) financial and political support of their governments or (2) extension service capability to focus immediately on subsistence farmers—the principal cause of deforestation.

Greater use of established agricultural extension systems in lieu of creating somewhat duplicative forest service extension systems could in the short run, introduce improved forest and land-use conservation practices to subsistence farmers. AID and other donors have endorsed strategies in their policy papers which could encourage greater use of this approach by integrating forestry and agriculture programs.

Although building the management capabilities of forest service organizations will be needed to bring about long-term and sustained forestry programs in developing countries, GAO believes AID and other donors should focus increased attention on strategies to slow the destruction of forests caused primarily by subsistence farmers.

MORE DONOR COORDINATION AND DEVELOPING-COUNTRY COOPERATION IS NEEDED

Coordination and cooperation among international donors at the country level is infrequent and is not encouraged by host-governments. At the international level, efforts to establish a focal point to coordinate international action on forestry has not been very successful. The lack of coordination was attributed to (1) a lack of country interest, (2) varying political and economic interests of donors and the countries, and (3) competition among donors. GAO strongly encourages involved U.S. agencies to continue their efforts to coordinate where possible, both at the international and country levels.

RFCOMMENDATIONS

The Administrator of AID should

- --support forestry-related projects that are within host-government political and financial capabilities and work with countries to engender more positive government commitment to deforestation problems;
- --assess the implementation problems which have delayed some projects and where problems are attributable to limitations on host-government capabilities, adjust the projects to be better suited to developing-country capabilities;
- --implement integrated strategies, such as those already endorsed in the Agency policy paper, which incorporate forestry assistance with agriculture programs; and
- --use established developing-country agricultural extension systems as a more direct, economic vehicle for introducing improved forestry and land-use conservation practices to subsistence farmers.

Because of the complexities surrounding forestry destruction and the financial resources needed to reverse its accelerating trend, the Secretaries of the Treasury and State should request the international organizations, in designing their projects, to give greater consideration to subsistence farmers residing in and around forested and watershed areas targeted for their projects.

Furthermore, because the agricultural projects of many multilateral organizations are designed to increase food production, we recommend that the Secretaries of State and Treasury stress the importance of improving the productive quality of the land now under cultivation by using more forestry elements in their agricultural programs. Improved food production on existing land can help reduce subsistence farmers' dependence on expanding the amount of land under cultivation. This should lead to more effective protection of the remaining forests.

AGENCY COMMENTS AND OUR EVALUATION

AID generally agreed with GAO's recommendations in principle. The Agency concerns include (1) the need for longer timeframes to effectively plan, carry out, and sustain forestry and related natural resource projects, and (2) the effective use of existing agricultural extension services. The difficulties, as AID sees them, are centered on how to provide alternatives for the landless and small landowner farmers, and how to deal with competing demands for more food.

GAO recognizes and agrees with most of AID's concerns but believes there is potential to do more to better focus U.S. assistance on the primary causes of deforestation. Doing more, in GAO's view, includes working to settle subsistence farmers into more permanent and intensive farming systems. The fact that these problems are being addressed by AID and other donors, to varying degrees and with some success, is evidence that the problems are susceptible to some measure of resolution.

The Department of State agreed with GAO's principal findings. Concerning host-government commitment, State said that the report did not adequately recognize the rapid growth of world-wide concern about forestry loss or that developing countries are beginning to respond to a rapidly developing situation.

State commented that the report only indirectly addresses AID's catalytic role in forestry assistance. GAO's discussion of host-government commitment is intended to point out that donor forestry assistance planning should realistically assess both existing and potential capabilities and constraints of host-governments which directly affect the implementation and sustainability of forestry projects.

The report has been revised to reflect the additional information provided by AID and State.

GAO believes AID is attempting to respond to congressional interest and recognizes that AID is only one of many international donors providing assistance—none of which can be expected to have a major impact alone.

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	ABBREVIATIONS	
ADD	Bodom Donalomant Donle	

ADB	Asian Development Bank
AID	Agency for International Development
GAO	United States General Accounting Office
FAO	Food and Agriculture Organization
IDB	Inter-American Development Bank
IFAD	International Fund For Agricultural Development
MDB	Multilateral Development Bank
OTA	Office of Technology Assessment
USDA	United States Department of Agriculture
	-



Tropical forests, such as these near the town of Puerto Viejo de Sarapiqui, are rapidly disappearing in Costa Rica. (Photo by GAO staff.)



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CHAPTER 1

INTRODUCTION

The world's forests are considered to be a renewable natural resource because they can regenerate under different ecological conditions. Forests can be renewed through the natural process of plant succession even when trees have been completely removed from an area due to human and natural disturbances. In most developing countries, however, the forests and woodlands are being cut and removed—and are not being replaced—by an increasing number of people. This process, sometimes referred to as deforestation, is accelerating. Its causes are many, including the quest for fuelwood, shelter, fodder, wood and wood chips for export, and pulp for paper. The principal cause, however, is linked to the subsistence farmers of developing countries and their efforts to gain space for food production and rural development.

Forests in many developing countries are not renewing themselves quickly enough to sustain the adequate forest resource base which is necessary to support the environment and economic growth of the growing populations in these countries. The "Global 2000 Report" issued to the President in July 1980, concludes:

"Of all the environmental impacts implied by the Global 2000 Study's projections, the forest changes [deforestation] pose one of the most serious problems, particularly for the less developed regions of the world."

Other scientific studies have projected the rate at which forests are vanishing in the developing regions of the world. The Food and Agriculture Organization (FAO) estimate of 30 million acres a year is the most frequently cited estimate of forest loss. The FAO Director General told the World Forestry Congress in 1978, that the rate of deforestation "is unacceptable, not so much as a percentage of forest total, but because of where and why it is happening." Some scientific research studies estimate that some developing countries will lose their remaining forests by the end of this century. The mounting concern over the impact of deforestation on the long-term development of these countries has prompted many bilateral and multilateral donors to give assistance for conservation, research, and education.

Emerging recognition of the cooperation needed between the development assistance community and the developing countries to prevent this complex problem from becoming unmanageable, was one of the key factors prompting the Congress in 1978 to authorize executive branch assistance to developing countries to protect

and manage their natural resources. These congressional concerns primarily affect the programs of the Agency for International Development (AID), which has lead responsibility for carrying out U.S. foreign assistance programs.

In December 1981, Section 118 of the Foreign Assistance Act of 1961 was amended:

- --to require the President to consider the importance of forestry in (1) formulating and carrying out programs and policies for bilateral and multilateral assistance as well as for private-sector activities in developing countries and (2) seeking opportunities to coordinate public and private development and investments which affect forests in developing countries; and
- --to state the importance the Congress attaches to U.S. representatives to the United Nations and to other appropriate international organizations urging that (1) higher priority be given in the programs of these organizations to the problems of forest degradation and loss and (2) there be improved cooperation and coordination among the organizations involved in forestry projects.

On April 15, 1981, the AID Administrator approved a policy which establishes the Agency's position on achieving forestry objectives in a manner designed to be consistent with its overall development objectives. In its policy paper, AID noted that tree loss is only a symptom of a larger set of environmental, energy, and agricultural problems. Recognizing that the deforestation problem requires a broader commitment to altering unsustainable forest resource use, AID policy states, in part, that:

"AID fully recognizes the importance of forestry as a key component of environmental and ecological systems * * * It should be emphasized that AID's program of assistance in forestry will encompass program and policy options well beyond the narrow bounds of tree planting. Programs that assist developing countries to improve their capacity for making sound forestry and related land and natural resource use decisions normally will be conducive to creating sustainable and productive land use patterns in the long-term."

Within this context, two points are important: (1) the complexities of deforestation cannot be solved with U.S. forestry assistance alone, and (2) AID considers itself a catalyst to effect the kinds of changes in host-government policies and target group attitudes that will promote sustained progress from the available resources of AID and other donors.

AID has initiated many forestry and natural resource projects since fiscal year 1978 to support the congressional mandates which urge a concerted U.S. assistance effort for developing countries. (See table below.)

AID Fundin	g for For	estry and	Natural K	esource Pro	lects
	FY 1978	FY 1979	FY 1980	FY 1981	FY 1982
Project type	(actual)	(actual)	(actual)	(estimate)	(request)
			- thousand	s	
Institution-					
building	\$ 620	\$10,319	\$ 13,412	\$ 17,581	\$ 19,389
Information/					
education	250	3,840	3,016	5,185	7,354
Conservation/	10 405	20 015	(1 600	60 477	E 4 7333
land management	10,435	39,015	61,523	60,477	54,722
Vegetative cover:					•
Fuelwood	900	4,300	11,301	8,550	37,609
Other (including	3				
forestry)	890	13,229	20,402	16,046	33,926
Total	\$ <u>13,095</u>	\$ <u>70,703</u>	\$109,654	\$ <u>107,839</u>	\$ <u>153,000</u>

Source: Agency for International Development.

Recent information provided by AID to the House Appropriations Committee on AID's bilateral assistance program in forestry and natural resources shows that, as of fiscal year 1981, \$579 million has been authorized for forestry-related projects. In its report, AID estimates that \$136 million (or about 24 percent) of this total funding was for direct forestry activities, including tree planting. The balance of AID funding was allocated to capacity building activities, such as, education, forest services, and land-use assessments.

AID's forestry assistance program is committed to altering unsustainable forest resource use in developing countries. Many of the AID forestry assistance projects and forestry-related components of agriculture and rural development projects are designed to strengthen the countries' forest services and natural resource institution mechanisms to manage forestry efforts at both the national and community levels. AID's forestry assistance projects include the provisions of (1) services of experienced foresters, (2) equipment, (3) education, and (4) training and technical assistance. Some of the project activities include natural resource data collection and analysis, land-use resource management plans, and tree planting projects for: fuelwood, watershed protection, and commercial forestry production. In its report, AID states

that less than 40,000 acres of trees had been planted through fiscal year 1981, and over 375,000 acres of trees to be planted before the projects are completed.

To initiate an extensive forestry program, AID has entered into staff resource agreements with the Peace Corps and the U.S. Department of Agriculture (USDA) Forest Service. As a result of these agreements, AID has been able to expand its forestry program by adding experienced U.S. foresters and volunteers who are capable of bringing needed technical capabilities to subsistence farmers.

An initial objective of the AID forestry program was to obtain baseline data to design a strategy to deal with the destruction of forests in developing countries. The U.S. Forest Service completed a study, 1/which AID had commissioned, to obtain this baseline data. The study provided AID with information on (1) bilateral and multilateral donor forestry projects, (2) forestry problems which developing countries faced and what was being done about them, and (3) project approaches which seemed to succeed or fail.

For the major multilateral institutions in which the United States participates, the Forest Service inventory of forestry projects disclosed the following program information about the loans and grants awarded to developing countries.

- --The World Bank has expanded its program beyond commercial timber harvesting practices to include lending for the reforestation of watersheds and the production of fuelwood, fodder, poles, and timber for local use. As of June 30, 1979, the Bank had approved, or planned to approve, \$852 million for commercial forestry projects and \$314 million for other forestry assistance.
- --To tap the abundant forest resources in Latin America, the Inter-American Development Bank (IDB) program focuses primarily on commercial timber harvesting and milling. The Bank's strategy primarily views the forest resources as a source of wealth to further economic development of the region. As of June 30, 1979, the Bank had approved, or planned to approve, \$259 million for commercial forestry projects and \$15 million for other forestry assistance.

^{1/&}quot;Forestry Activities and Deforestation Problems in Developing Countries," U.S. Forest Service, July 1980.

- --To further the economic development of the Asian region, the Asian Development Bank (ADB) program emphasizes commerical forestry projects. As of June 30, 1979, the Bank had approved \$25 million for commercial forestry projects and \$7 million for other forestry assistance.
- --The FAC forestry program is the most diverse of all bilateral and multilateral donors. Started in 1948, it has a staff of 300 foresters stationed throughout most developing countries. FAC foresters are generally stationed in the developing countries to manage projects and provide technical assistance on both a short—and a long-term consulting basis, and they handle diverse problems, from commercial harvesting to conservation measures. As of June 30, 1979, FAC had approved, or planned to approve, \$24 million for commercial forestry projects and \$145 million for other forestry assistance.

These multilateral institutions receive a large share of the contributions for multilateral assistance projects from the United States. These development institutions will hereafter be referred to collectively in the report as "major multilateral institutions." In summary, these major multilateral institutions had approved, or planned to approve, \$1.2 billion for commercial forestry projects and \$481 million for other forestry assistance.

OBJECTIVES, SCOPE, AND METHODOLOGY

The objective of our review was to evaluate whether forestry projects, and forestry-related components of agriculture and rural development projects have been promoting improved and self-sustained forestry and natural resource conservation in developing countries. Accordingly, we have examined

- --host-country commitment to determine whether there is sufficient interest in developing countries to successfully sustain U.S.-assisted forestry projects;
- --project plans, designs, and implementation to determine whether recently approved projects have focused on the principal causes of deforestation and provide needed solutions or remedies; and
- --coordination and cooperation among AID and the major multilateral institutions in creating programs that will increase the sustained use of forest resources in developing countries.

Because of growing congressional interest regarding the actions of AID and the major multilateral institutions to arrest the accelerated deforestation, we undertook this review to report to the Congress on the status of this U.S. assistance effort. We helieve a close examination is warranted at this early, but important, stage of program development and project implementation.

Because the major multilateral institution projects are outside our direct audit authority, our review focused on AID forestry projects in selected developing countries. The countries we selected—Costa Rica, Honduras, Indonesia, Nepal, and Senegal—were chosen to provide a balanced regional coverage of forestry problems, donor 1/ programs, and varying environmental conditions in Asia, Africa, and Latin America. Because forestry management and conservation have been, and continue to be, a low priority for most developing countries, the report's recommendations are not directed toward specific AID projects, but instead are directed at improving AID's overall project planning and policies which guide Agency efforts in achieving its forestry objectives.

Our work was coordinated with the Office of Technology Assessment (OTA) and the Department of State. Both organizations are studying different aspects of deforestation. More specifically, OTA initiated a study of technologies for sustaining the tropical forests in developing countries during January 1982. The OTA study, requested by the Subcommittee on Human Rights and International Organizations, House Committee on Foreign Affairs, will examine available technical and scientific information and will report to the Congress on those technologies most appropriate for replenishing the vanishing tropical forests.

The State Department commissioned the University of Washington to examine the role of those U.S. multinational corporations engaged in commercial forestry operations. According to a State Department official, the 2-year study was completed in March 1982 and assesses U.S. Government policy options for such corporations. In the interest of avoiding unnecessary duplication, our review did not include an examination of these matters. This review was conducted in accordance with our current "Standards for Audit of Governmental Organizations, Programs, Activities, and Functions."

^{1/}Donor, as used in the report, refers to bilateral countries and multilateral organizations which provide economic assistance to developing countries.

CHAPTER 2

IS HOST-COUNTRY COMMITMENT SUFFICIENT

TO SUSTAIN U.S.-FUNDED FORESTRY PROJECTS?

We found that each developing country we visited was outwardly committed to solving forestry problems and was working with AID and other donors to resolve implementation problems. We believe, however, that the very real economic, political, and social problems will continue to limit the countries' abilities to address the principal causes of deforestation: the clearing of forests from mountains, hilisides, and other marginal land by a growing and predominantly subsistence farmer 1/ population that is constantly searching for more farmland, fuelwood, livestock fodder, and pastures.

AID project plans and implementation must more realistically assess the capabilities and limitations of host governments to do complex forestry-related development projects, some of which involve technologies never before tried or tested. We believe that project implementation and sustainability will be very uncertain unless AID recognizes that proposed forestry projects must not exceed a country's political and financial commitments.

Some projects are already having delays and serious implementation problems. Therefore, we believe AID should reassess whether the host-government forest service organizations can implement the projects as originally planned. Helping ease the deforestation problem will necessitate a willingness on the part of AID to plan fewer projects and possibly accept the need for successive projects.

Our evaluation of 18 forestry AID projects and project components having primary focus on forestry, fuelwood, and related natural resource conservation in five selected countries, found that host-government implementing institutions—generally their forest service organizations—were unable to obtain the necessary financial and political commitments from their governments to (1) effectively reform existing land—use practices and, in some cases, related laws and policies and (2) fund required counterpart contributions and recurring budgetary expenses for forestry projects.

<u>l</u>/Hereafter, when we discuss subsistence farmers as being the principal cause of deforestation, we will be referring to both landless and small landowner farmers.

EXISTING LAND-USE PRACTICES IMPEDE REFORESTATION IN DEVELOPING COUNTRIES

An important factor contributing to accelerating deforestation is shifting cultivation 1/ which the predominantly agrarian populations practice. Shifting cultivation has increased in the past 25 years. As populations have increased, the practice has been used more extensively in regions where soils and topography are clearly unsuited for intense cultivation. Presently, it is estimated that hundreds of millions of farmers now use these methods. Estimates for Asia indicate that from 30 to 80 million people involved in shifting cultivation are occupying between 187 and 300 million acres of land.

In Costa Rica, Honduras, and Nepal, AID has approved three large projects. In planning these projects, AID carefully studied subsistence farmers' cultivation practices, perceptions about forests, and conservation, and related host-government laws and policies. We found implementation delays, and ultimate completion was jeopardized due to existing land-use practices; and, in some cases, related host-government laws and policies. AID's project strategy is to slow deforestation and improve land productivity by providing economically workable alternatives so that

- --host-country governments are encouraged to change existing laws and policies that have actually worked in the past against reforestation and
- --subsistence farmers are involved in community forestry activities, such as resin extraction, beekeeping, and fuelwood production, to demonstrate the economic alternatives to the devastating practices associated with shifting cultivation.

We visited Costa Rica, Honduras, and Nepal. We found in Honduras that AID projects were not very successful in changing forestry laws and policies to encourage reforestation. In addition, we found that AID projects had little effect on the shifting cultivation practiced in these three countries.

^{1/}Shifting cultivation is a term used to describe the agricultural practice of cutting forests and vegetative cover over a wide area--allowing it to dry for burning--then cultivating the land for short periods. As long as population density is not critical and fallow periods are long enough for vegetative cover to regenerate through natural plant succession, scientists see no problem with this practice.

Political constraints jeopardize forest conservation projects in Honduras

AID's approved and planned forestry projects for Honduras include activities for commercial and community forestry development, watershed management, and fuelwood production. According to AID, the successful implementation of these projects depends, in part, on the ability of the Honduras Government to change existing policies and legislation. Because of the importance of these policy changes to successful project implementation, AID has conditioned project disbursements to government action on these matters. As of May 1982, AID had withheld payments for the approved project and suspended its plans to approve the planned project.

Essentially, AID wants policies revised to (1) allow the project beneficiaries (subsistence farmers) to own all trees planted under the AID projects, and (2) authorize an increase in the stumpage fees which the forest service corporation pays them. During our meetings with the AID staff in Honduras, we learned that the Honduras Government had not yet agreed to make such policy changes. According to the AID staff, such policy changes might require some change to Honduras Law 103, which declares all standing timber in the country to be the sole property of the Government.

Two years ago, just prior to approving the Honduras forestry and natural resource project, AID Washington registered its concern with the mission staff about Honduras' commitment to adopt these policy changes. Because of the serious deforestation in Honduras, however, AID decided to make a conscious attempt to bring about policy changes that other bilateral and multilateral donors had tried unsuccessfully to do. AID officials said that their efforts had been hampered due to uncertainties surrounding the politics of the Honduras presidential elections held in February 1982. In May 1982, AID officials acknowledged that there had been no change but said, however, that the newly elected Government officials reacted favorably to the forestry projects.

Making changes in Nepal and Costa Rica will be difficult

During our review work in Nepal and Costa Rica, where progressive changes in forestry and land-use policies have already been made, we learned about the difficulties of obtaining committed public support from subsistence farmers to improve forestry and land-use practices once developing-country governments have instituted progressive conservation policies.

In 1978, Nepal passed significant forestry legislation, which returned ownership of the trees to its people, an action which AID believes the Government of Honduras must take. The Nepal forestry

legislation established community forests from former national ones. Village communities are required to plant tree seedlings and to protect and maintain the new community forests. We learned, however, that despite this intense commitment of the Nepal Government toward such progressive conservation laws and policies, its subsistence farmers generally view such government actions as suspicious, interfering with their struggle for survival.

During our visit to one Nepal community that AID had selected for its large project, we learned from project officials that efforts to encourage the local residents to plant new seedlings had not been as successful as originally hoped. According to project officials, available Nepal extension agents have had to take additional time to, first, convince the farmers that they should plant trees and, second, educate them on how to plant, nurture, and protect the seedlings. The Secretary of Nepal's Ministry of Forest and Soil Conservation believes that much emphasis must be placed on assuring that the farmers know how to plant the trees distributed to them. Otherwise, the trees are unlikely to survive, and farmers will be very reluctant to accept and plant other seedlings.

A joint World Bank and FAO Community Forestry Project is having similar problems in educating and convincing Nepal farmers to plan and care for seedlings. Peace Corps volunteers in Nepal believe that changing the subsistence farmer's perceptions about forestry is a lot easier when farmers are convinced that it is advantageous for them to participate. To "sell" forestry and watershed management, Peace Corps volunteers told us that incentives, such as fruit trees and fodder grasses, should be used. A Canadian representative said that Nepal community forestry assistants often lack the technical skills to teach farmers about planting and nuturing trees.

According to AID's Mission Director in Nepal, farmers are starting to realize that forests must be better managed as they are forced to walk twice as far for fuelwood, fodder, and building materials. Other officials with whom we spoke, including Peace Corps and FAO representatives, said they were optimistic that farmers' attitudes about accepting forestry conservation would continue to gain momentum.

According to FAO, the Government of Costa Pica has passed considerably stronger conservation laws and policies than most other developing countries. The Government has established national rarks and forest reserves which cover about 10 percent of the country. In addition, the Government forest service has set up tree nurseries and demonstration projects to encourage forestry and natural resource conservation. In some areas, the Government has declared deforestation an emergency, urgently stressing conservation.

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Nevertheless, farmers consider land to be too valuable to be used for anything other than essential crops and pastures to provide food for their families. According to the Deputy Director of Costa Rica's forest service, the idea of planting trees on one's small piece of land seems absurd to most farmers. Consequently, he said the number of trees planted has been clearly insignificant, compared to Costa Rica's actual needs. Officials for the Office of Land Planning advised us that only 2,500 to 3,000 acres of land have been planted with trees during the past They noted that the Reforestation Law passed in 1977 5 years. to provide Costa Rican farmers a \$2,000 tax deduction for every 2 and 1/2 acres of their land planted in trees had not resulted in much reforestation. The officials said that this is because the economic incentives which the law provides favor the wealthy landowners.

In Costa Rica, as in most of Latin America, much available land is controlled by cattle ranchers. Costa Rica's cattle industry, for example, is dominated by little more than 200 ranchers who control half the land in use. In Honduras, we observed how subsistence farmers have, for the most part, been forced to move their families and livestock into the mountainous watershed regions because the large cattle ranchers have claimed much of the once agriculturally productive valleys for grazing. Although the cattle industry provides a source of foreign exchange for Honduras and other Latin American countries, subsistence farmers must often move around sparse mountainsides, searching for farming sites and places to graze their livestock and causing environmental damage in the process. (See photographs which follow.)

The following statements by Costa Rican subsistence farmers indicate how difficult changing the understandably self-centered concerns of subsistence farmers will be with each focusing on their own property and family needs.

"The government tells us that we need more grain. They encourage us to plant corn for the country. I want to cultivate this land that is now forested. Yet, they also tell us we can't cut down the trees. Sure, the trees are good, too, but what should a man do? You can't do both the things at once."

"Trees serve no purpose for farmers. I have to use every piece of my land for my crops. There is no value in forests. We can't have food around here if we save the forests."

The mutual reinforcement of forestry and agriculture appears to hold opportunities for providing practical solutions to the destruction of forests. As various studies have already shown,

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unless AID and the other bilateral and multilateral donors can develop strategies to provide subsistence farmers with solutions that are both environmentally and economically workable, the destruction of forests will continue.

FINANCIAL REQUIREMENTS FOR FORESTRY PROJECTS EXCEED DEVELOPING-COUNTRY FINANCIAL COMMITMENTS

Many international conferences and related studies have indicated that accelerated deforestation can create serious consequences to the overall economic development and social well-being of people in developing countries. The strategy statements which AID and the major multilateral institutions prepare, however, generally reflect that most developing countries are unable to make the political and financial commitments to reverse the destruction of their forests and other natural resources.

During our meetings with AID missions, other bilateral and multilateral donors, and responsible country officials, we were informed that most developing countries are confronted with worsening economic problems brought on by growing populations, increasing demands for agricultural products, and the high cost of imported oil for industrial expansion. During our visits, we were advised that because of these financial problems, a growing competition for available funds exists. Because agriculture and food production problems are most often given the highest development priorities, governments cannot support forestry institutions and their related forestry projects. Traditionally, developing countries with abundant forests have harvested their trees to help solve their financial problems without adequate attention to conservation measures which could assure long-term, sustained yields.

Budget and organizational problems are not realistically assessed

Project delays and implementation problems have caused concern about the planning assumptions used to assess host-government financial capabilities of successfully sustaining projects. Our review found that AID has not realistically assessed a fundamental obstacle. Specifically, most host-government forest service organizations have extremely limited capabilities because of very low operating budgets and limited staff experience. Generally, the forest service budgets and staffs are among the smallest host-government departments.

In some countries we visited, forest service officials acknowledged that worsening economic problems have increased the likelihood of further project delays and implementation problems, especially for the large multimillion-dollar projects. Moreover,



Trees and other vegetation have been cleared from these Honduras mountains, as more subsistence farmers search for more farmland, pastures, fuelwood, and livestock fodder. (Photo by GAO staff.)



further budget and staff reductions are likely. We learned that it may be impossible for Costa Rica, Honduras, Nepal, and Senegal to meet the required counterpart contributions and recurring budgetary expenses which are needed to fully sustain the proposed forestry projects.

Before projects are approved, AID project papers reflect the host-government commitment and financial feasibility of attempting large, multimillion-dollar projects. The successful outcome of the projects also depends on many variables, including (1) cooperation from host governments in reforming certain laws and policies, (2) subsistence farmer interest in conservation, and (3) changing environmental conditions.

AID project papers generally conclude that developing-country governments can afford to finance the forestry projects. We found that host-government forest service officials disagreed with AID's conclusions. They believed that AID project plans had not realistically assessed their low operating budgets and limited staff and organizational capabilities. In Costa Rica, we were informed about two projects where AID had expanded agreed-upon project activities, far exceeding organizational capabilities.

Reforestation in wet, tropical regions and arid zones not considered a priority investment by developing countries

The environment in many developing countries is unfavorable-either very wet and tropical or semi-arid and dry. In addition, the soils and topography in many regions are clearly unsuited to the intense cultivation and livestock grazing practices of an increasing population of subsistence farmers, who are seeking more crop land and vegetative cover.

The realities of such unfavorable environmental conditions, combined with inadequate information about appropriate forestry management practices, contribute further to significant conservation problems. Unlike the pine and deciduous forests found in the temperate zones of North America and Europe, researchers have yet to attain economically viable and workable solutions to regenerate forests in wet, tropical regions and in arid zones. AID foresters told us that developing-country governments have generally not considered the money and time required for forestry projects to be priority investments. Consequently, some developing countries have been unwilling to financially support conservation programs in these regions. During our country visits, we traveled to regions selected for AID fieldwork and observed some of the unfavorable environmental conditions which have deterred natural tree regeneration and are most likely to jeopardize donor forestry projects.

Reforestation is not considered cost-effective in the wet, tropical regions of Costa Rica

In some regions of Costa Rica, the annual tropical rainfall generally exceeds 300 inches. According to the Tropical Research Center in Costa Rica, once tropical forests have been damaged or (clear cut), such excessive rainfalls pose a serious obstacle to regeneration. In Costa Rica, we found that the implementation of the 2-year-old AID Natural Resource Conservation Project is likely to be further delayed because of Costa Rica's unwillingness to undertake the project's forestry production component. Their concern is about the economic feasibility of the project.

The Deputy Director for Costa Rica's forest service told us that the Government does not approve of AID's site selection, stating that it would be difficult to carry out the reforestation needed for long-term, sustained forestry production because of the very wet, tropical conditions in this region. AID project officials insisted that no one would ever know if artificial or natural regeneration of tree species is possible under such wet, tropical conditions, unless someone takes the risk. The Deputy Director said that forest service objectives are to use its limited funds for forestry projects it is capable of doing. AID's Acting Mission Director advised us that an advisory group of AID and Costa Rican personnel would soon be formed to help resolve the issues. The advisory group will study the Sarapiqui region and two alternative sites to resolve Costa Rica's concerns about the cost effectiveness of reforestation in wet, tropical regions. In October 1981, the Acting Mission Director said that AID might be forced to withdraw funding for this project unless this disagreement is resolved.

Dry and semi-arid conditions impede reforestation in Honduras

In Honduras, the 6-month dry season causes the grass cover, upon which subsistence farmers graze their cattle, to become coarse and unsuitable for grazing. To improve grazing, the subsistence farmers burn the coarse grass to grow new grass more suitable for livestock. Annual fires, however, disrupt the natural regeneration of the country's pine forests. Between 1978 and 1980, these grass fires affected an estimated 605,250 acres.

Under proper management, Honduras' pine forests should regenerate into productive timber within a 30- to 40-year period after commercial harvesting. However, subsistence farmers almost always move their cattle into the commercially harvested pine regions. Seed trees are left after commercial harvesting to promote natural regeneration, however, annual grass fires have disrupted this natural regeneration cycle. The young pine seedlings do not survive. (See photographs on page 15.)



Seed trees have been left at this logging site in Honduras to provide for the natural regeneration of cut pine forests. (Photo by GAO staff.)



Pine forests in Honduras cannot regenerate themselves because young pine seedlings such as this one do not survive the grass fires set by subsistence farmers.

(Photo by GAO staff.)

According to a Honduras forest service official, the cost of fighting the fires is a financial burden and is a deterrent to spending money for forestry projects. The AID foresters in Honduras acknowledged that it will be difficult to protect replanted areas from the widespread grass fires in Honduras.

CONCLUSIONS

Because of similar problems in the countries we studied, we believe the gravity of deforestation has been demonstrated. Moreover, we believe that our country case studies lend further support to other studies, which have concluded that the forest resources remaining in the developing countries will likely continue to disappear even faster as fewer trees remain to satisfy the basic needs of an expanding population. Officials in countries we visited wish to reverse this accelerating trend, however, forestry conservation and tree planting in these countries continues slowly. Moreover, in some instances, the existing land-use and forestry policies actually discourage forestry conservation.

Over the past 5 years, AID has significantly increased its own organizational expertise and project activities as part of a congressionally mandated program effort to bolster reforestation and conservation in developing countries. However, to date the effectiveness of the AID forestry program has been seriously impaired because many of the proposed projects tend to exceed the developing-country political and financial commitments to improved use of forests and land.

Although the developing countries have established forest service organizations, they are insufficiently funded by their governments and do not have enough trained staff to undertake the level of projects which AID proposed. As a result, it has become difficult, if not impossible, for these forest service organizations to satisfy AID project covenants and conditions. These would require developing countries to change laws and policies and guarantee the necessary budget support to initiate and sustain the projects.

AID project planning must more realistically assess developing-country capabilities and limitations to do complex forestry-related development projects, some involving new or untested technologies. Some projects are already experiencing delays and serious implementation problems, accounted for somewhat by AID's zealousness in responding to congressional mandates by planning more forestry projects than the countries can realistically do over a relatively short-term period (generally 5 years). AID should adjust its project planning to reflect the realities of limited host-government commitment to forestry problems as current project implementation and sustainability appear uncertain. Thus, we believe that AID should assess whether host-government forest service organizations can implement the projects as originally

planned. We also believe this will necessitate a willingness on the part of AID to plan fewer activities and accept the need for possible successive projects to help satisfy the longer-term forestry assistance requirements of developing countries.

RECOMMENDATIONS

We recommend that the Administrator, AID support forestryrelated projects that are within host-government political and financial capabilities and work with countries to engender more positive government commitment to deforestation problems.

We further recommend that the Administrator assess the implementation problems which have delayed some projects and where problems are attributable to limitations on host-government capabilities, adjust the projects to be better suited to developing-country capabilities.

CHAPTER 3

DOES U.S. ASSISTANCE FOCUS

ON THE PRINCIPAL CAUSES OF DEFORESTATION?

The principal cause of deforestation—the subsistence farmers' clearing of forests for pastures, farmland, fuelwood and livestock fodder—is not being adequately addressed in U.S. assistance activities. We found that

- --fuelwood projects, which AID and other donors funded, do focus on alleviating a major cause for deforestation, but these projects will not satisfy the increasing demand for fuelwood in developing countries;
- --forestry and natural resource conservation projects, which place considerable emphasis on strengthening host-government forestry programs, do not focus enough attention the principal cause of deforestation; and
- --development assistance project planning can have a more direct, immediate, and lasting impact on the principal cause of deforestation through integrated forestry and agriculture programs.

Many AID projects are attempting to bolster the capabilities of host-government forest services to encourage improved forestry and natural resource conservation among developing-country subsistence farmers. The effectiveness of this project approach is questionable in our view because the forest services lack the (1) financial and political support of their governments and (2) extension systems needed to introduce improved and sustained conservation practices to subsistence farmers. Thus, the AID project institution-building measures may turn out to be too late because, as the mounting body of scientific research shows, the time to save the remaining forests is running short.

We believe that forestry assistance, which AID and the major multilateral institutions sponsor, can be more effective if planned and implemented in conjunction with existing agriculture programs. Although AID and the major multilateral institutions have endorsed this strategy, we found relatively few forestry project funds represented as components of existing agricultural and rural development programs, especially when compared to the total funding for their agriculture projects. Thus, in our view, there are opportunities to do more to focus on the principal causes of deforestation.

FUELWOOD PROJECTS FOCUS ON ALLEVIATING A MAJOR CAUSE OF DEFORESTATION BUT WILL NOT SATISFY INCREASING ENERGY DEMANDS

The harvesting of wood for fuel has been, and will remain, a major cause of deforestation. This observation has been well documented in numerous studies, such as the "Global 2000 Report" to the President. These studies describe how fuelwood harvesting is creating expanding deserts and landscapes which are virtually void of trees. Examples cited in the studies are Haiti and the southward expanse of the Sahara desert in Central Africa. Because of growing shortages of fuelwood during the last 20 years, much concern has been generated within developing countries. Many countries are unable to afford the high price of fossil fuels and electricity programs for their rapidly growing rural populations. AID and other bilateral and multilateral donors are allocating more forestry assistance for fuelwood projects and, according to a National Academy of Science study for firewood crops, agencies are showing a new awareness of the importance of forests.

AID has substantially increased spending for fuelwood projects. (See ch. 1.) In fiscal year 1978, AID spent under \$1 million on fuelwood projects, compared to an estimated \$37 million during fiscal year 1982. Despite such increased spending by AID and other donors, the World Bank calculates that—even if wood-conserving stoves, solar cookers, and other appropriate technologies are to save energy—an additional 50 to 60 million acres of trees must be planted by the year 2000. The World Bank estimates that at the 1978 rate of replenishment, that is 10 times more tree acreage than will be achieved. The Club du Sahel estimates that regional shortages may be more serious in the Sahel, where forests must increase fifty-fold to meet fuelwood demands for the year 2000.

The smallest AID fuelwood projects are village woodlots in Africa (25 to 50 acres); the largest AID project is a plantation in India (120,000 acres). The projects have been designed to determine the feasibility of somewhat unproven technologies and concepts and to provide AID with information on

- --similar fuelwood projects to be duplicated elsewhere;
- --existing and new tree species to survive in different soil, climate, and rainfall conditions; and
- --local beneficiaries to accept and participate in the projects.

AID believes that these projects can speed the collection of essential information which traditional forestry research has not yet compiled. To improve the opportunities for successful projects, AID has collaborated with the U.S. Department of Agriculture's (USDA) Forest Service, the Peace Corps, and private voluntary organizations, to assist the developing countries with the necessary financial resources, technical capabilities, and needed skills.

Our review showed that AID fuelwood projects in Senegal have experienced a mixture of successes and shortcomings. Although their progress thus far has been slowed due to assorted management and technical problems, we believe many such problems can be avoided or alleviated in future projects by imparting its experiences to its developing-country missions.

FORESTRY AND RELATED NATURAL RESOURCE PROJECTS DO NOT FOCUS ENOUGH ON THE PROBLEMS OF SUBSISTENCE FARMERS

Some of AID's largest forestry-related projects are generally referred to as natural resource projects and are designed to strengthen the forest service organizations and establish extension systems through which developing countries can manage their forests and related natural resources. The projects also propose programs to help develop the institutional expertise in making land more productive through appropriate land-use practices. Project activities generally include soil conservation and agriculture, fuelwood production, reforestation, commercial forestry production, range management, pasture improvement, community nurseries, and irrigation and watershed protection.

Although establishing forest service organizations and developing their management capabilities is needed to bring about long-term and lasting forestry improvements in developing countries, AID and other donors need to direct increased attention on strategies to minimize the destruction of forests caused by subsistence farmers. AID's natural resource projects will attempt to do this through community forestry projects.

Natural resource projects emphasize community forestry activities

AID has authorized funds for natural resource projects in three of the countries we visited. (See chart on the following page.)

Project	Country	Cost millions)	Cost description
Natural resource management project	Honduras	\$21.9	AID loan & grant covers \$14.9 million of total cost
Natural resource conservation project	Costa Rica	\$15.7	AID loan & grant covers \$9.8 million of total cost
Natural resource conservation & utilization project	Nepal	\$32.5	AID grant covers \$27.5 million of total cost

In connection with these projects, the AID missions said that attaining project goals for rehabilitating the mountainous watersheds in these countries will involve the formidable task of gaining subsistence farmer participation. AID foresters told us that maintaining the participation of the subsistence farmers, who reside in these watershed regions, will be difficult because of the long periods required to implement forestry projects. The Honduras natural resource project includes a component which will attempt to overcome the problem of farmer participation by organizing farmers into community groups and cooperatives.

During our visists to the proposed project sites, the AID staff explained how the project will generate increased employment and income for the subsistence farmers living in and near the forests. AID hopes that the projects can provide the needed economic incentives to help establish better farming techniques among subsistence farmers.

Community forestry is a concept that FAO developed. FAO foresters have been working for many years to assist countries such as Honduras, Costa Rica, and Nepal, in establishing viable community forestry systems. Under this concept, subsistence farmers are encouraged to become involved in forestry projects, such as resin extraction, thinning and clearing, beekeeping, fuelwood and fodder production, commercial replanting, and logging. The AID mission staff believes that once subsistence farmers learn to recognize and associate an economic value with trees, they will be discouraged from moving about, burning and cutting the forests.

Constraints on community forestry projects

The FAO staffs in Honduras and Nepal told us that their community forestry projects in these countries have been unsuccessful for many reasons. According to an AID regional forester, the principal difficulty with implementing a viable community

forestry system in any developing country is lack of knowledge and information about planning. He also said that the lack of trained and experienced forestry personnel within host governments has also impeded past efforts.

Within the government-owned and controlled Honduras forestry development corporation, less emphasis has been given community forestry than commercial forestry development. The nationalization and commercial development of Honduras forests has brought a great deal of mechanization and decreased employment. As a result, unemployed workers residing in and around forested regions often contribute to ongoing destructive cultivation methods.

According to an FAO publication, the forest service in Costa Rica is considered a model for other developing countries. Nevertheless, the Forest Service Deputy Director told us that the community forestry and commercial projects AID proposed will be difficult to implement at this time. He believes that community forestry projects can help change the perceptions farmers have about the importance of forests, however, he noted that the country's economic crisis and the lack of an established community forestry technology will make implementation difficult.

Community forestry projects can only partially solve forestry problems

The community forestry projects AID planned for Nepal will also be difficult to implement because of the very large human and animal population residing in selected project sites. According to an international scientist, it is not economically feasible under these conditions to include the vast majority of a country's subsistence farmers in community forestry projects. The only long-term solution to this problem, he said, is to reduce the number of people and livestock inhabiting land that clearly cannot support such large populations.

The World Bank experience with similar projects has shown that investments in such projects have had to be matched and often exceeded by substantial farming and agricultural investments. World Bank officials believe that the key to containing the negative consequences of deforestation caused by shifting cultivation is to improve the subsistence farmer agricultural practices and productivity. They noted that it is a most difficult task to design projects which balance agricultural inputs with appropriate conservation measures.

Substantial investments in reforestation, soil conservation, irrigation, flood control, and other environmental measures—which are provided more in concert with related agricultural assistance—should achieve better results if, at the same time, subsistence farmers are aided in adopting more productive and

techniques. We believe there are opportunities for AID and other donors to do more to achieve this balance through their agriculture programs.

GREATER USE OF INTEGRATED FORESTRY PROJECTS MAY HELP DETER DESTRUCTION OF FORESTS

AID and many bilateral and multilateral assistance partners have issued policy papers on forestry projects which suggest various strategies for approaching the problem of deforestation. AID and the major multilateral institutions emphasize the importance of combining forestry with agriculture programs. AID's policy paper, for example, cites this approach as providing for the most efficient and ecologically sound use of resources because it emphasizes (1) the establishment of efficient and sustained land-use practices and (2) the provisions which the small farmers need to prevent further forest destruction.

Although AID and the major multilateral institutions have issued similar forestry policy papers endorsing the need for integrated forestry and agriculture projects, we observed that the donor use of combined forestry and agricultural programs varied substantially. The financial data for 1979 (see chart below), generally compares the amounts of forestry-related funds and amounts for forestry components, with total funding for agriculture and rural development projects.

COMPARISON OF TOTAL FUNDING FOR AGRICULTURE AND RURAL DEVELOPMENT WITH FUNDING FOR FORESTRY						
Agriculture and Rural Development Funding						
<u>Donors</u>	Total funding	Forestry and forestry-related funding 1/(millions)	Forestry component funding			
World Bank Food and Agriculture	\$ 2,522.0	\$ 178.7	\$ 122.2			
Organization	294.0	83.8	1.8			
Agency for International Development	610.0	62.6	3.6			
Asian Development Bank	412.0	31.7	6.5			
Inter-American Development Bank	676.0	.6	.6			
1/Includes funds for commercial forestry projects.						

IDB officials advised us that although its support for forestry was small in fiscal year 1979, its participation in the financing of these projects was substantial during the 1970s. Bank records show that it obligated \$259 million, primarily for commercial forestry projects, between calendar years 1974 and 1978. A recent U.S. Forest Service inventory of all donor forestry projects found a dominance of commercial forestry projects in developing countries, including financially supported pulpmill and sawmill complexes rather than conservation projects. The study concluded that continuing this trend would exert greater pressure on existing forest reserves and would contribute to forestry problems. FAO also points out that commercial forestry projects, such as timber harvesting for pulp and paper, tend to be capital-intensive, bypassing the large populations of subsistence farmers who live in and around forests.

AID headquarters foresters believe that these figures understate the current efforts underway at the missions to incorporate forestry projects into agriculture and rural development programs. We agree that AID and the major multilateral institutions are integrating forestry project components (predominantly institution-building) into a wide spectrum of environmental, energy, and agriculture projects. Our point is, however, that they have not yet effectively integrated forestry assistance programs with their agriculture programs to sufficiently focus on the subsistence farmers, many of whom are outside major agricultural economies of developing countries.

Opportunities are available to do more

During our discussions with the AID missions, we were told that only a few agriculture projects include forestry components. According to environmental staff members at several missions, forestry's role in food-production projects is not being fully exploited. The AID environmental officer in Senegal, for example, stated that he has had to force both current and planned agriculture and rural development projects to include more forestry elements for erosion control, windbreaks, watershed protection, forage, and soil regeneration.

In Costa Rica and Honduras, we observed that some farmers use trees as living fence posts. The living fence posts are generally used by farmers who practice permanent cropping to form property boundary lines and to keep those farmers who practice shifting cultivation out of their planted fields. AID foresters who accompanied us in Central America said that farmers in all Latin American countries like to use this boundary method because it is inexpensive and eliminates the effort often required to replace rotted fence posts.

AID foresters agreed that the living fence post concept was practical and could help introduce farmers to (1) more permanent

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cropping practices and (2) some of the newer, fast-growing trees for fuelwood. They told us that AID and the multilateral institutions were aware that this boundary concept is used in other regions of the developing world and could be easily adapted.

World Bank and IDB officials said that the agricultural and rural development programs of multilateral organizations should be broadened to promote greater use of forestry projects. Officials of both banks believe that multilateral organizations, particularly food organizations like the International Fund for Agricultural Development (IFAD), should avoid narrow interpretations of their lending criteria which exclude forestry projects. They noted that such an action would tend to place limitations on financing arrangements for agriculture and rural development projects which have forestry components.

Scientific studies and experiments continue to document the many benefits of using strategies which combine forestry and agriculture programs. Based on this scientific evidence and our own observations, we believe that greater use of these integrated strategies, such as agroforestry $\frac{1}{2}$, can change the environmentally destructive farming practices which contribute largely to forestry losses.

Integrated approach provides incentives for host governments and subsistence farmers

We observed a very successful forestry/agriculture project that the Senegal Government has sustained and expanded since 1948. The project involves the planting of trees to prevent the sand dunes from covering the fertile land along Senegal's northwest coast and to protect villages from shifting sand.

In the coastal zone of northwest Senegal between Dakar and Saint Louis, low-lying, fertile areas produce excellent crops of vegetables after the rainy season without irrigation. Because of strong west-to-northwest trade winds and excess grazing, how-ever, the sand dunes have been moving inland. An estimated 10 percent of this fertile area has been lost.

In September 1979, the Senegal Government requested AID assistance for a project to link the earlier forestry and dune stabilization projects which the Canadian International Development Agency and FAO financed. In response, AID arranged a \$6.9 million, 3-year forestry project to (1) link the earlier projects, (2) provide the village farmers with fuelwood, and (3) form a continuous windbreak and dune stabilization. Local currency-generated through P.L. 480, Title III--is being used for the program. About \$2.3 million

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<u>1</u>/The practice of agroforestry includes planting trees with food crops to increase yields of food, fuel, fodder for livestock, and materials for shelter.

in U.S.-donated food under P.L. 480, Title III, is also being provided through the World Food Program.

According to the AID staff in Senegal, the AID forestry project is probably quite different from most AID-funded forestry projects because, first, the Senegal Government and the village farmers are all very committed to the project. The Government wants to protect this fertile land because the vegetable crops which the farmers grow earn \$3 million in foreign exchange, annually. Further, the 9,000 village farmers who live there understand the importance of protecting the trees to maintain their income.

We saw seedlings (Casuarina species from Australia) planted and maintained by the village farmers, that were planted only 2 months ago in an area 10 kilometers long and 200 meters wide. The seedlings appeared to be thriving in virtual desert conditions, receiving rain only 3 months of the year. (See photograph below.)



This AID project in Senegal is being financed through the P.L. 480 Program. The project will provide a wind break to stabilize sand dunes which threaten agriculturally productive land. (Photo by GAO staff.)

opportunities to reach subsistence farmers

Recause forestry management requires much time, the assistance efforts of the United States and other donors to bring improved and sustained management techniques to developing countries will be difficult. Moreover, because project implementation depends largely on host-government forest service organizations to carry out the proposed projects, much of the donors' long-term investments in forestry projects may be in jeopardy.

AID acknowledges that U.S. forestry assistance in developing countries faces serious obstacles. Host-government forest service organizations are generally fledgling organizations and do not have (1) the technical capabilities to implement many proposed project plans, (2) the financial support of their governments, or (3) the extension systems needed to introduce improved and sustained forestry and land-use practices to the small subsistence farmers.

AID officials said that many forestry projects have substantial institution-building components to remedy these deficiencies. Although we perceive this as a desirable long-term method to improve and sustain these projects, many research studies indicate that there is insufficient time to save the forests in some developing countries. Thus, many activities may not reach subsistence farmers.

Using an integrated agriculture and forestry approach could provide for economies of scale, by using and strengthening the established host-government agriculture extension systems to carry out the added responsibilities for forestry and natural resource conservation. This approach could reduce the need for some of the extensive institution-building plans for the host-government forest service organizations which AID officials are proposing.

If some of the emphasis on forestry institution-building can be reduced, the host-government counterpart contributions and recurring budgetary expenses might be correspondingly reduced, thus, easing serious implementation problems. Further, better use of established agricultural extension systems may also help readily overcome the problem associated with changing the attitudes of subsistence farmers about forestry and natural resource conservation. In the countries we visited, the forest services generally have a credibility problem with subsistence farmers because of their policing activities which attempt to keep subsistence farmers away from forested regions. As a result, farmers have come to resent the forest service projects.

CONCLUSIONS

In line with continuing urgings from the Congress, AID and the major multilateral institutions have steadily increased

funding for forestry assistance to developing countries over the last 5 years. However, much of this assistance has been allocated to commercial and capacity building activities which do not immediately address the farming and fuelwood needs of subsistence farmers. The destructive search for more farmland, fuelwood, livestock fodder and pastures, as practiced by increasing numbers of subsistence farmers has been the principal cause of forest destruction.

Although building the management capabilities of forest service organizations will be needed to bring about long-term and sustained forestry programs, we believe that AID and other donors should focus more immediate attention on improved forestry and natural resource conservation practices for subsistence farmers. Because the fledgling forest service organizations do not have (1) the financial and political support of their governments or (2) the resources and extension systems needed to easily reach the subsistence farmers, we question whether AID's forestry program is effectively focused.

AID acknowledges that reaching and helping subsistence farmers is the key to deterring the deforestation problem. The best method to approach this task is of continuing concern. From our perspective—based primarily on the content of AID's ongoing forestry efforts—we believe that greater attention should be given to the more immediate needs and concerns of subsistence farmers. This could include

- --more education in the use of land fertilizer, seeds, and available water for irrigation;
- --more community-oriented training in participative fuelwood production;
- --more activities to increase small farmers'
 incomes, such as resin extraction, beekeeping, fuelwood and charcoal production,
 and small wood products and handicraft enterprises; and
- -- the establishment of forest service credibility among villages through better-planned pilot projects to demonstrate the maintenance and use of nurseries.

Recent studies show that many forestry projects are focused on commercial forestry projects which tend to bypass the subsistence farmers who live in and around forested regions. Similarly, our review found that AID's forestry program does not focus enough on introducing improved forestry and natural resource conservation practices to subsistence farmers because many of AID's forestry projects are geared to improving the management capabilities of fledgling forest services.

We believe that AID and other donors could better focus on forestry problems by striving to channel more of their assistance through the established agricultural extension systems, whose principal focus is the subsistence farmer. Of course, there are practical and political constraints to be considered in doing this, including the availability of land, training information, technology, and the need for close cooperation between host-government agriculture ministries and forest service organizations. Better use of the established agricultural systems, in lieu of creating somewhat duplicative and expensive forest service extension systems, would, in our view, provide a more direct and economic vehicle for reaching subsistence farmers.

AID and other donors have endorsed strategies which encourage project planners to integrate forestry and agricultural assistance programs. We believe this integration would promote a better use of established agricultural extension systems. We found, however, that AID and the major multilateral institutions have been slow in implementing integrated forestry strategies.

RECOMMENDATIONS

We recommend that the Administrator, AID,

- --implement strategies, such as those already endorsed by the Agency's forestry policy paper, which encourage Agency program officials to incorporate forestry assistance with agricultural and rural development programs whose principal focus is the subsistence farmers; and
- --seek the cooperation of other donors and the developing countries, where appropriate, to develop the needed links for using established developing-country agricultural service extension systems as a more direct and economic vehicle for improving the forestry and natural resource conservation practices of subsistence farmers.

Because of the complexities of forestry problems and the financial resources needed to deter the destruction of forests, we recommend that the Secretaries of the Treasury and State request international organizations, in designing their projects, to give greater consideration to the impact on the subsistence farmer populations residing in and around forested and watershed areas which are targeted for commercial timber harvesting, and road, dam, and irrigation construction projects. Such targeted areas could be subject to further destruction if the subsistence farmers' means for making a living are not improved.

Because the agricultural projects of these multilateral institutions are designed to increase food production, we recommend that the Secretaries of State and Treasury request the U.S. representatives to these organizations stress the importance of improving the productive quality of the land now under cultivation by using more forestry elements in the agriculture programs supported by these institutions. These activities could include greater use of nitrogen fixing trees for soil regeneration, fruit and nut trees for cash crops, greater use of wind breaks, and more attention to conservation practices to prevent soil erosion. Such action is needed to deter the destruction of the remaining forests and vegetative cover in developing countries.

CHAPTER 4

DONOR COORDINATION AND DEVELOPING-COUNTRY COOPERATION

COORDINATION AND COOPERATION EXIST BUT ARE INFORMAL AND INFREQUENT

Coordination among international donors and the cooperation of developing countries are important if duplication is to be avoided and the host-government use of assistance is to be enhanced. Factors requiring the efficient management of resources include: competing priorities, limited funds, the inability of developing-countries to manage the assistance given, and severe development problems. The rapidly increasing number of donor-sponsored forestry projects reflects the increased donor interest in deforestation.

Generally, we found that forestry problems were beyond the capability of any single donor to solve. Yet, donors and recipient countries shy away from formal coordination mechanisms. Donors compete to have their projects accepted by the host governments, and they seem to know little about other donors. We found that the coordination that does take place is informal and of little value. We believe that better use of resources and a more responsive approach to forestry problems would have resulted with more donor coordination.

The need in each country for coordination differs and the type of coordination needed also differs. The country-specific, ad hoc approach may be appropriate for some countries where few donors exist. Where there is a large donor interest, however, a more formal mechanism is needed to use the unique attributes and capabilities of each donor.

If every developing country had strong leadership and a rational forestry/agriculture development plan and the donors had unlimited resources, perhaps fewer problems would exist. However, the existing situation in most developing countries suggests that donors need to adopt a cooperative approach so that their combined efforts will effectively solve the forestry problems.

The donors and host-country officials with whom we spoke had different views on the causes of limited donor coordination. Most agreed, however, that the essential elements for well-coordinated development are (1) the active interest and participation of donors and host governments, (2) the existence of a forestry management plan to serve as a focal point for donor activity, and (3) strong leadership to provide direction and to set the priorities appropriate to local conditions. We found some or all of these factors missing in each country we visited.

Donors tend to coordinate their activities at the international and country levels as they perceive their needs. From our observations at the country level, donor coordination tended to be infrequent and was not especially encouraged by host governments. At the international level, U.S. efforts to establish a focal point to coordinate forestry projects have not been very successful, thus far.

COORDINATION AT THE COUNTRY LEVEL

The interest of the host government is the most crucial; it will effect the planning, execution, and, ultimately, the results of all donor initiatives. In Nepal, the Government does not place a high priority on donor coordination. Government has serious land-use problems to manage, so it wants to maintain extensive donor assistance. The Government also recognizes that it does not have the capability to handle the extensive assistance which donors are offering but, with some donor cooperation, the problem is being contained. Six foreign donor agencies are now working on projects in Nepal. donor representatives said that other donors have offered to fund forestry and related natural resource projects. to Government and donor officials, some donors continue to push for projects in Nepal even though the country does not have the trained and qualified staff to assign to other donor forestry projects.

Donors generally praised the Government of Nepal for its efforts in establishing a geographic and lead donor approach. The idea is for each donor to use its own particular expertise and specialize in a designated geographical region. The strongest donor in forestry management, for instance, would coordinate the efforts of the other donors in a specific region and would supply the management expertise the country lacks. According to AID project officials, this concept has not yet been accomplished.

According to the World Bank country representative, thought was given at one time to establishing a donors' group in Nepal. The Government, however, disliked the idea, and the group was never formed. Other donors mentioned the proposed group, and one said that the Government was afraid the donors were trying to "gang-up" on it. That attitude might be changing, however. According to a Government official, a mechanism established by the donors to coordinate the technical portion of the projects would be ideal.

In Senegal, no formal mechanism exists to coordinate donor activities. With the exception of ad hoc, informal meetings relating to items of mutual interest, donors interact almost entirely on a bilateral basis with the Senegal Government. In several

cases, we found donors working on similiar forestry projects with little or no knowledge that other donors were working in the same area. Donor officials, including the United States, said they wished for more coordination among themselves and with the Senegal Government; however, several agree that (1) active interest and participation from the Government and (2) a master forestry plan to serve as a focal point to guide donor forestry projects must occur before this can take place. Several donor officials said that they have not actively tried to persuade the Government to become more interested in coordination because of the issue's sensitivity. An AID Mission official suggested that Senegal has exploited the lack of coordination by playing some donors against others, thereby increasing the total amount of assistance made available by donors.

We believe the Government of Indonesia tends to exacerbate its coordination problem by giving its employees an honorarium for each donor project they generate. Hence, Government employees are interested in a large number of projects; the more projects, the more money. These incentives cause each local manager to try to absorb progressively more assistance—which may be well beyond the manager's capability. Each manager, within his own competitive sector, is not likely to be interested in opportunities to combine or complement other efforts because that would reduce the number of projects. An FAO official complained that government staff do not devote full time to forestry projects and attributed the failure of an earlier FAO project to this cause.

According to an official of the Honduras Government, the Department of International Coordination is the organization responsible for coordinating donor projects to prevent duplication. However, this official said that it has not been successful in coordinating donor forestry projects. The problem is that donors first approach the government forestry development corporation with their projects. The Honduras official said that the projects pass through the government coordinating agency after the donors and the forestry development corporation plan and agree to the projects.

COORDINATION AT THE INTERNATIONAL LEVEL

To be successful, coordination and cooperation require a unity of direction and purpose and effective leadership. At the international level, this leadership does not exist. More formal coordination seems to exist at this level, however, than at the country levels. The goal of international coordination efforts is to provide more effective forestry assistance to developing countries. To date, few benefits of high-level coordination have been evident in the countries.

To illustrate, there are three formal organizations concerned with forestry matters in the Sahel: The Club du Sahel in Paris; the CILSS, the permanent Interstate Committee for Drought Control in the Sahel in Ouagadougou, Upper Volta; and the Cooperation for Development in Africa (CDA). These are policy and priority setting organizations, not involved in project execution.

The Club du Sahel and CILSS are interested in expanding their coordination roles. The Club du Sahel, located in Paris, is a flexible association of the Sahelian countries and all governments or public organizations interested in the development of the region. Created in 1976 with support from the United States and other donor countries, it collaborates with CILSS by (1) facilitating the mobilization of resources, (2) providing information on Sahelian states, and (3) serving as a forum for dialogue on the needs of Sahelian development.

CILSS collaborates with the Club du Sahel and has an Executive Secretariate located in Ouagadougou, Upper Volta. CILSS establishes policies for drought control and other development activities in the region and operates two specialized research and training institutes in Niger and Mali. According to AID officials in Senegal, the roles of these two organizations have grown beyond drought control now that the crisis is over. Although we were unable to meet representatives of these organizations, AID officials believe that the Club du Sahel/CILSS now see their roles as promoting greater coordination and cooperation among donors in the Sahel.

The purpose for the formation of CDA was as a coordinating mechanism for external development assistance in the poorest parts of Africa, but not limited to the Sahel region. The U.S. representative to CDA sees no role for CDA below coordination with mission directors. He stated that CDA is not intended to address in-country project-level coordination involving exchange of lessons learned or day-to-day technical information. He described this type of coordination as costly and time-consuming, with only limited potential for achieving meaningful results. Thus, it appears to us that project-level coordination in Sahelian countries will continue to be ad hoc and lacking a systematic exchange of lessons learned.

In the other organizations, international coordination is equally ad hoc and informal. For instance, the coordination between AID and the development banks is not done through formal mechanisms but through occasional meetings and telephone conversations. For instance, when the AID mission directors are in Washington, they generally attempt to visit the country officers at the banks and discuss their respective development project problems and plans.

The State Department believes that FAO is best suited to assume responsibility for coordinating forestry-related projects

at the international level. The State Department said that it was referring to non-country specific project activities of a global nature, financed by numerous international organizations. Some examples are the research studies and pilot projects of various U.N. agencies and the World Bank which pertain to tropical biology, climate relationships, and forestry practices. In regard to coordination at the country level, the State Department believes the UNDP resident representative should take the lead for donor coordination of forestry activities as a natural part of UNDP's broader mandate.

The FAO has a large group of foresters that provide technical assistance to most developing countries for specific forestry devel-These foresters provide their services at the request opment needs. of the host governments. In January 1982, a joint FAO/UNDP/UNESCO Second Experts Meeting on Tropical Forests endorsed a recommendation that the existing FAO Committee on Forestry Development in the Tropics be expanded in membership and its terms of reference modified to enable it to carry out a central review and coordination role. At the Sixth Session of the Committee on Forestry, an advisory group of FAO member countries adopted a recommendation whereby the Director General of FAO is to consider the usefulness of giving additional strength to the Committee on Forestry and report his findings to the next Conference. According to State Department and USDA officials, FAO management is reviewing these efforts.

FAO officials stated that their organization's current role is one of technical advisor and not as a director of forestry projects and management policies at the international and country levels. FAO believes that each country should set its own priorities and make its own forestry management decisions. FAO officials perceive that taking on a lead role responsibility could subject the agency to possible criticism for attempting to direct recipient government priorities by telling them how to structure their forestry programs. FAO views such a role as one that would infringe on the sovereignty of developing countries. FAO also believes that to avoid the label of being paternalistic, it should not assume lead-role responsibility.

State Department and U.S. Forest Service officials agree that their efforts to get FAO to assume a leadership role have been unsuccessful. They pointed out that, essentially, FAO is most responsive to the priorities of the developing countries (known as the Group of 77), and that the major concerns of these countries are food production and agricultural development. Because most countries do not view forestry development as a top priority, they have not actively pursued forestry issues at the FAO meetings. Consequently, until the developed countries can get developing countries to support forestry issues at FAO meetings, bringing about a stronger FAO leadership role in coordinating forestry assistance will be difficult.

U.S. officials are still optimistic that changes will take place within FAO. The Committee on Forestry is pushing for the FAO Department of Forestry to take the lead role in forestry development and coordination in developing countries. Such U.N. agencies as UNEP and UNESCO and developed countries are supporting this effort. U.S. Forest Service officials indicated that many developing countries understand the need for a concerted effort to fight forestry problems and will probably support U.S. efforts at future FAO conferences.

EXAMPLES OF INSUFFICIENT COORDINATION AND COOPERATION

We found varying effects of insufficient coordination among donors and cooperation by host governments. Among the potential effects of this are host-government inability to absorb the assistance and missed opportunities to share experiences among the donors. The following discussion presents some of the observations and examples of the coordination problems encountered.

In Senegal, an AID livestock project designed to improve cattle grazing in the Senegal River Basin, includes efforts to plant trees around four wells to protect the soil and provide cattle forage. During the design phase, the planning team visited the wells and discovered that the West German assistance agency had selected two of the wells for a similar project and had already started planting trees. Although AID subsequently modified their project, the situation illustrates that a lack of communication among donors causes unnecessary duplication and wasted effort.

We believe that the donors and host governments have equal responsibilities to coordinate their activities. Although host countries are primarily responsible for this task, it may fall on the donors when the host countries are unable or unwilling to fulfill its role. In this case, opportunities were missed to benefit from a combined effort.

As mentioned previously, the Government of Nepal has assigned donors to conduct projects in specific geographical regions, thus, eliminating the possibility that more than one donor will be initiating similar projects in the same village or area. This tactic has helped to control donors in Nepal, but this approach has at least one major deficiency. The geographical approach does not guarantee that problems faced by a donor in one region have not already been addressed and solved by a donor working in another region.

As previously noted, the practice of paying honoraria to Indonesian Government employees has probably generated more projects then can be effectively handled, thus, increasing the

rotential for duplication. We were informed by officials of three donors that the Government had requested their assistance to research its forest resources. The acting AID Mission Director complained that different Government agencies might also ask for the same types of projects. We tend to agree with this AID official, who was not sure if donor coordination takes place at all. For example, an AID project officer, who was responsible for watershed development, did not know that ADB was doing a watershed project. In addition, the AID officials were unable to provide us with a current list of the forestry projects being conducted in Indonesia.

Problems with the number of donors and their projects often go hand-in-hand with shortages of host-government, counterpart funds. The Honduras Government has underfunded some forestry projects to the point that little or nothing is being done. Closer donor coordination would inform everyone of the funding difficulties that host governments are experiencing. They would be able to either accommodate the deficiency or institute an appropriate solution.

CONCLUSIONS

At the country level, donors choose to coordinate their activities informally, infrequently, and for limited purposes. The donors attributed the lack of coordination to several factors. Among them were (1) a lack of government interest in donor coordination, (2) varying political and economic interest of the donors and the host governments, (3) the lack of forestry management plans and the leadership to execute them, and (4) competition among the donors. Donors are not always willing to coordinate, often opting to (1) keep-their operations to themselves, (2) retain independence of action, and (3) gain as much political mileage as possible for their individual efforts.

We believe it is the responsibility of the host governments to manage the foreign assistance they receive. As we have stated in previous reports, if the host governments are unwilling or unable to perform the necessary coordination and management, the responsibility falls to the donors. Developing a host government's capability to manage and coordinate then becomes a priority for the donor community.

At the international level, effective coordination and cooperation among donors for forestry projects can only take place if the recipient governments of developing countries fully endorse that concept. FAO officials believe, and we agree, that any attempts by international organizations to coordinate donor activities without such an endorsement would be counter-productive to solving forestry problems.

We believe that coordination is essential if the maximum benefit is to be made of the limited resources being allocated to fight forestry problems. To this end, the U.S. Government, through the Department of State and other involved U.S. agencies, must continue to encourage and work for change in the international arena. The Department of State should continue to seek change through the FAO Committee on Forestry and through other appropriate organizations. We also believe that there is a need to involve MDBs in these coordination-seeking forestry discussions. The banks' resources which are devoted to forestry projects are large and are increasing rapidly. We, therefore, strongly encourage the agencies to continue and improve their efforts, where possible, at both international and country levels.

CHAPTER 5

AGENCY COMMENTS AND OUR EVALUATION

We requested comments on a draft of this report from AID, the Department of State and the Department of the Treasury. We received comments from AID and the Department of State.

AGENCY FOR INTERNATIONAL DEVELOPMENT

AID generally agreed with our report recommendations and offered several suggestions to clarify the issues we presented. AID did express concerns which should be considered in terms of how some report recommendations could be implemented. These concerns, which we consider valid, include the following:

- --the need to strengthen the forestry components of integrated projects addressing agriculture, energy, and rural development, to give reforestation a higher priority;
- --the cautious use of existing agricultural extension services in developing countries, recognizing the political and practical constraints involved (e.g., agricultural ministries are generally separate from forestry institutions, and extension agents may be ineffective without a knowledge base in forestry);
- -- the need for longer timeframes to effectively plan, carry out, and sustain forestry and natural resource projects;
- -- the need to recognize the small landowner farmers and the shifting, landless farmers as being equally important in targeting assistance to the causes of deforestation; and
- --the recognition that AID's primary challenge is to act as a catalyst in attempting to increase commitment of host countries to forestry development.

Where appropriate in the body of the report, we have made modifications in light of AID's concerns, including (1) a clarification of the definitions of forestry and forestry-related efforts so that they are more in line with AID's categorization of these activities; (2) a reflection of the added measure of integration evidenced by more current information provided; and (3) a recognition that small landowner farmers are among those contributing to the causes of deforestation and, thus, need assistance. Among the difficulties, as AID sees them, are how

to provide alternatives for the landless and the small landowner farmers; and how to deal with the competing demands for more food production.

AID agrees that developing countries should not be saddled with more forestry assistance than they can use and that the Agency's current program tends to be integrated and directed more to building institutional capacity. The Agency also pointed out that there are occasions when forestry assistance is best suited to discrete forestry projects. AID sees its current portfolio of forestry projects as only a first generation of assistance efforts. Because many projects are building on emerging host-country concerns, AID believes it is too soon to predict developing-country commitment.

Our report points out that AID should tailor its forestry assistance to what the developing countries can reasonably be expected to implement during the life of the project. Our recommendation is not intended to imply that AID should only be involved in forestry activities where institutional capacity is already established. We are suggesting that AID project planning more carefully assess, on a country-by-country basis, both the existing and near-term potential capabilities of countries to meet the political and financial requirements of AID project covenants and conditions.

AID commented that agriculture extension organizations are seriously challenged to handle existing agricultural responsibilities and may not be in a position to provide extension services to the small hillside subsistence farmers. AID also noted that the small landowner and landless farmers are considered to be outside of the developing countries major agriculture economics.

Our recommendation urging greater use of existing agriculture extension systems is based on the fact that in most developing countries these systems generally receive more government support than the fledgling forest service organizations. Moreover, most country forest service organizations do not now have the extension system capacity to bring the necessary conservation programs that would help them adopt more stable and productive agriculture practices.

On our report recommendation for the need to better integrate forestry and agriculture programs, AID noted that this reinforces current Agency policy guidance. The Agency said that its forestry assistance activities are already well integrated, but agreed that greater attention could be given to using its agriculture programs as instruments for solving food and forestry problems.

We recognize that some degree of integration exists, as noted in our report. However, using its agriculture program for solving food and forestry problems will not realize its full potential unless AID makes a concerted effort to convince developing countries to include the landless and small landowner farmers as part of any solutions. The fact that the problems are being addressed

by AID and other donors, to varying degrees and with some success, is evidence that the problems are susceptible to some measure of resolution. While recognizing the complex nature of many forestry activities—the longer timeframes generally associated with tree growth and the cultural and economic constraints (e.g., land owner—ship, population, food production, and employment) which exist in many developing countries—signs of initial success should offer encouragement to AID and other donors.

For example, the initial success of one AID village woodlot project in Senegal, under Peace Corps volunteer assistance, is notable because of planning which avoided or minimized problems, such as lack of village support. Within the next 3 to 5 years, this woodlot should provide village farmers with a steady source of fuelwood and thereby protect the remaining trees. In another effort, the cooperation of the Senegal Government and village farmers, coupled with Canadian, UNDP, and AID resources, is being translated into fuelwood production, wind break and sand dune stabilization, increased food production, and foreign exchange earnings.

The design and initial implementation of AID's Resources Conservation and Utilization Project in Nepal indicate that the prognosis for project success is improving. As a result of AID-supported training and educational efforts, farmers in the target areas are becoming more cognizant of the seriousness of the deforestation problem and the need to plant and protect trees. Although the Government is finding it difficult to finance its contribution to the project, it is committed and working toward supplying the trained people needed to meet its responsibility for administering and managing the project.

Understandably, the forester alone cannot be expected to solve problems caused by shifting cultivation. As we discuss in Chapter 3 and elsewhere in the report, a balanced, integrated project approach may be the better way to address the complex concerns and needs of host governments and subsistence farmers.

AID's involvement in forestry has been steadily increasing both in resources committed and efforts expended. It may be useful to emphasize some of the factors we see acting as constraints to sustained progress in the battle against deforestation at this early, but important, period of program development. These include the fact that (1) most of the Agency's forestry-related support remains in the planned and approved stage awaiting implementation, (2) most of it is targeted to the development of institutional capacity rather than to the shifting agricultural practices of landless and other small landowner or subsistence farmers, (3) existing AID and other donor strategies for integration of forestry and agroforestry projects with agricultural assistance programs have not been adequately implemented, and (4) opportunities to use established agricultural extension systems to bring

improved forestry, conservation, and land-use practices to subsistence farmers, have not been fully pursued.

DEPARTMENT OF STATE

The Department of State agreed with the report's principal findings, noting that the report's findings are important and supportable. State specifically agreed that

- --AID projects should match host-country capability and commitment,
- --AID should integrate its forestry projects with agriculture and rural development programs,
- --improved donor coordination is necessary at both country and international levels, and
- --State and the Treasury should work to promote higher priority for forestry problems in developing countries.

Concerning host-country commitment, State Department said that the report did not adequately recognize the rapid growth of worldwide concern about forestry loss and that developing countries are beginning to respond to a rapidly developing situation. We are optimistic that the new initiatives among host countries will translate into much more positive government commitment and action on deforestation problems. We wish to point out that the very real economic, political, and social problems faced by host countries will continue to limit the countries' abilities to address the causes of deforestation. It is not that developing countries do not care as much as we do, the point is that in planning their forestry assistance projects, donors should realistically assess the existing and potential capabilities and constraints of host-governments which directly affect the implementation and sustainability of forestry projects.

Regarding State's comments on AID's forestry assistance role, our report discusses the many-faceted aspects of delivering assistance in the forestry area and AID's efforts to carry out a program of forestry assistance in developing countries. We believe AID is attempting to be responsive to congressional directives and executive branch policy. Indeed, AID is only one of many organizations providing forestry assistance. No organization can be expected to have a major impact alone. As we discuss in Chapter 3, AID and other donors have found that many developing countries are unable to make the political, national, and financial commitments to facilitate many of the current and planned forestry activities. Accordingly, most donors apparently do what they can within the confines of host-government policies, farming community attitudes, and competing priorities. We address these and other points in the report, and our recommendations are intended to help improve current donor efforts.

In its comments on international donor coordination organizations, the State Department said that the report should provide some analysis of the Club du Sahel and CILSS programs, which have been designed to be a model for donor coordination. We agree with the State Department that the Club du Sahel and CILSS are important coordination mechanisms, which continue to work for solutions to the serious environmental and development problems of the Sahel region. To the extent possible, we have revised the report to provide some additional information on the roles of these organizations.

Referring to the report's discussion of the U.S. position on FAO leadership in coordinating donor forestry activities, the State Department provided additional information, and we have revised the report to reflect the State Department position.

The State Department also noted that it had not accepted the FAO argument that FAO should not attempt to coordinate at the international level because the developing countries will see this as paternalism. The State Department noted that it was asking FAO to coordinate on entirely different types of forestry activity, i.e., those of a global nature financed by international organizations, and that its recent survey of developing-country attitudes about FAO's proper coordinating role indicated broad-based support for State's position. State emphasized that it had not previously encountred the FAO concern discussed in our report. During our visits with representatives of FAO, the State Department, and the U.S. Forest Service, we were advised that FAO has some reservation about taking a lead-role responsibility for coordinating donor forestry projects at both international and countrylevels. Further discussion of these reservations are on page

The draft report discussion of a \$10-million, U.S. contribution to FAO has been deleted because the State Department withdrew the proposal to finance U.S. participation in the U.N. Associate Experts Program.

AGENCY FOR INTERNATIONAL DEVELOPMENT WASHINGTON, D.C. 20529

SENIOR ASSISTANT ADMINISTRATOR

August 27, 1982

MEMOR ANDUM

TO:

Mr. Frank C. Conahan, Director, International Division

U.S. General Accounting Office

FROM:

Nyle C. Brady, Senior Assistant Adminis

Bureau for Science and Technology

SUBJECT:

Comments on the GAO Draft Report, "Reforestation and Forestry Management Activities in Developing Countries: Is U.S. Forestry Assistance Being Effectively Used?",

dated July 14, 1982

In my memorandum of August 13, 1982, I indicated that the Agency believes that the GAO Draft Report requires extensive revision and suggested that we meet with GAO review team representatives to communicate reactions to the report in greater detail. Such a meeting was held earlier this week, and we agreed at the close of the meeting that $A\bar{\imath}\bar{\nu}$ would provide written comments and suggestions for revision of the Draft Report following the main points of our discussion. A paper with our comments and suggestions for revision is enclosed.

There was substantial agreement on a number of key points in our meeting with the GAO team representatives. Among these I believe it is important to emphasize our shared concern that the recommendations flowing from this Report recognize Congressional mandates for the Agency to provide assistance to developing countries that will strengthen their institutional capacity to carry out forestry programs and that will stimulate greater host country commitment to forestry development activities. We also agreed that it would be useful to review the Draft Report's recommendations in terms of how they could, in fact, be implemented. In this respect, careful consideration must be given to the need to balance concerns with integrating forestry activities with those in other sectors, such as agriculture, and the desirability of stimulating greater host country commitment specifically to forestry development. The comments and suggestions for revision which AID is providing describe in some further detail ways in which the Agency has sought to deal with these issues, especially in light of expressed Congressional concerns.

The Agency is prepared to cooperate in further review of the Draft Report. More detailed reactions and comments, particularly dealing with country project case study material, can be provided to the GAO review team during the process of reassessment and revision.

Attachment: Comments and Suggestions

Summary

The GAO report can be strengthened by attention to the following issues:

- 1. The terms "forestry program," "natural resources program," and "environment and natural resources program" are used interchangeably throughout the draft report. This makes analytical assessment of A.I.D. programs difficult and leads to uncertainty and lack of clarity as to improvements which should be made.
- 2. The report could be strengthened by referring to and including data from the February 1982 A.I.D. submission to The House Appropriations Committee entitled, "AID's Bilateral Assistance Program in Forestry and Natural Resources."
- 3. The report's emphasis on integration of forest programs with those in agriculture, energy and rural development is generally acceptable since most of A.I.D.'s forestry activities are currently being carried out in just such integrated projects. It is precisely this integration which tends to submerge forestry as a concern warranting separate attention. The report could emphasize more strongly the need to strengthen the forestry component of these integrated projects and to give reforestation a higher priority.
- 4. The suggestion that greater use be made of agricultural extension to encourage reforestation is welcomed. But the report could emphasize the even greater need of viable forestry research institutions to provide information that can be extended.
- 5. The danger of "overloading or swamping" indigenous LDC institutions is well taken. However, the report leaves the impression that A.I.D. should strengthen only those who are already strong. To correct this impression, the report could recognize the importance of designing long-range institutional development programs to help strengthen even the weakest of the national programs.
- 6. The need to have longer time frames for A.I.D. projects involving forestry warrents emphasis. The complex nature of most forestry projects and the long time required for tree growth dictate much longer time frames than for cultivated agricultural crop projects. This time factor seems to have been overlooked.
- 7. The report leaves the impression that it is the responsibility of the forester to solve the problems stemming from activities of shifting cultivators. These are sufficiently complex as to require the best inputs from agriculturalists, rural development specialists and, particularly, the policy makers in the LDCs. The multidisciplinary nature of the problem needs to be made clear.

Comments and Suggestions

for Revision of

GAO Draft Report

"Reforestation and Forestry Management Activities in Developing Countries:
Is U.S. Forestry Assistance Being Effectively Used?"

dated July 14, 1982

1. Interpretation of Forestry and Other Agency Programs.

The terms "forestry program," "natural resources program," and "environment and natural resources program" are used interchangeably throughout the Draft GAO Report. This has led to several problems of definition, both in terms of A.I.D.'s Congressional mandates and in the interpretations of purpose for a number of the A.I.D. projects cited in the Draft Report.

A. The sentence at the bottom of page ii is misleadin, when it states that "A.I.D.'s environmental and natural resource program" was "established at Congressional direction to help ease the developing world's worsening deforestation problems."

This statement defines the Agency's Congressional mandate in forestry too narrowly and suggests that forestry, the subject of the GAO Report, can be equated with everything encompassed within the realm of environment and natural resources.

While Amendments to the Foreign Assistance Act have recognized the serious consequences of deforestation (particularly the 1979 Amendments to Section 103), the Act actually authorizes the Agency to provide forestry-related assistance within a much broader development assistance framework than can be entirely captured by the goal of fighting deforestation.

The 1977 Amendments added Section 118 to the FAA calling upon A.I.D. to "Furnish assistance . . . for developing and strengthening the capability of less developed countries to protect and manage their environment and natural resources." The 1978 Amendments to the FAA amended Section 103 to authorize strengthening of forestry and soil conservation services to small farmers. Successive Amendments to Section 119 of the FAA in 1978 and 1979 strengthened the Agency mandate to deal with firewood production within its energy assistance efforts. Further, within the broader Agency economic development assistance framework, the Agency has also recognized forestry as being an important economic development opportunity, particularly (as stated in the Agency's Policy on Forestry) as an "instrument of rural income and employment generation." A number of recent assistance projects have begun to take advantage of forestry's potential for income and employment generation.

- B. The inappropriateness of using the terms "forestry program,"
 "natural resources program," and "environmental and natural
 resources program" interchangeably is illustrated by the fact that
 A.I.D. assistance projects dealing with subjects as far afield as
 the construction of sewage treatment facilities are included within
 the Agency's "environmental and natural resources" program.
- C. The first two sentences at the top of page 28 define several large A.I.D.-funded natural resources projects as being forestry projects. Using the \$27.5 million Resource Conservation and Utilization Project in Nepal as an example, it should be noted that project documentation states that "the project is an integrated and complex program. Single problem re ponses like a separate reforestation program are simply not adequate to deal with what is essentially a total problem. The project, therefore, employs a range of related interventions directed to addressing the whole social, economic and ecological system in each project area."

The Nepal RCUP is not a single purpose <u>forestry</u> project; rather it is an integrated agricultural and livestock production project directed at small farmers with important complementary agricultural soil and water conservation components.

The range of interventions included in the Nepal RCUP go beyond forest management and reforestation, to also include range management, animal husbandry, and livestock production, energy alternatives, improvement in agricultural production, watershed management involving agricultural soil and water conservation and engineering structures, irrigation, fodder production, community drinking water and fisheries. While the recent summary of A.I.D. forestry assistance projects delivered to Congress in February 1982 estimated that approximately 16 percent of the Nepal RCUP was actually "forestry," the GAO team refers to this project in its draft report as a "forestry initiative," and uses it as a cornerstone for its argument that AID needs to take a more integrated approach, and to deal less exclusively with "fledgling forest service organizations." Beyond the Nepal Department of Forestry, A.I.D. is in this project actually dealing with Nepal's Institute of Renewable Natural Resources, its Department of Soil and Water Conservation, its Ministry of Agriculture, Food and Irrigation, its Department of Agriculture, its Department of Local Development, its Department of Livestock Development and Animal Health, its Department of Irrigation, Hydrology and Meteorology, its Department of Water Supply and Sewerage and several other agencies.

2. Suggestion for Incorporating the Latest in Agency Program Information.

The GAO Draft Report could be greatly strengthened by inclusion of current summary information on the Agency's forestry assistance program. A.I.D. submitted a report to the House Appropriations Committee in February 1982

entitled, "A.I.D.'s Bilateral Assistance Program in Forestry and Natural Resources," which might be useful for this purpose (enclosed).

In this report to Congress, the Agency identified 72 ongoing bilateral assistance projects (as of January 1982) which were found to contain forestry-related assistance components. The summary of project information demonstrated a high degree of integration with other sectors (agriculture, rural development and energy). Only 24 percent of the funding for assistance activities within all bilateral projects containing forestry components was estimated to be devoted to forestry assistance activities per se. More than three-quarters (76 percent) of the funds included within all ongoing projects were found to be directed toward other agricultural, rural development and energy assistance efforts.

In addition, it should be noted that the table in the middle of page 3 entitled, "A.I.D. Funding for Projects or Project Components Concerning Forestry, Natural Resources and Environment," contains a decimal error of three places which was also contained in the A.I.D. document from which GAO derived the information -- the table should be labeled "\$ thousands," rather than "\$ millions."

More importantly, the figures used in this table take in a much wider range of A.I.D. program activities than forestry assistance projects.

3. Integration of Forestry Activities with Other Sector Programs.

The GAO Draft Report includes a recommendation to "encourage A.I.D. headquarters and mission staff to implement integrated strategies, such as those already endorsed in the Agency's forestry sector policy paper, that incorporate forestry assistance into planned and ongoing agricultural and rural development programs." As noted, this recommendation would reinforce current Agency policy guidance. However, it would also be useful for the Report to reference several associated issues:

The Agency's forestry assistance activities are modest and are already well-integrated, often as small components, within agriculture, energy and rural development projects. But greater attention could be given to utilizing agricultural programs (crop production, livestock production and conservation) as instruments for solving both food production and forest and related natural resource problems. Not only might the Agency's well-established agricultural program potentially represent a more important instrument for addressing many forestry and natural resources problems than is now widely recognized, but the improvement of farming systems for small farmers, which is recognized by the GAO Report as being so badly needed, can include the use of woody plants in soil nutrient cycling, crop fallows, fruit and nut cash crops, fodder and conservation aspects, as well as in woody biomass production. The national economic development, local income and employment and private sector involvement potential of forestry and forest resources would of course also continue to be pursued and expanded within the Agency's program.

B. Rather than being focused on forestry, per se, the majority of A.I.D. projects which contain forestry include supportive forestry components within larger agriculture, rural development and energy activities. So thoroughly "integrated" is the Agency's present program that only 23 percent of the funding within all ongoing assistance projects involving forestry is actually devoted to forestry, with the balance of 77 percent devoted to other agricultural, energy and rural development assistance efforts with which the supportive forestry work has been associated.

In some respects, however, there is frequently a trade-off between the advantages of integrating forestry concerns with other sector programs, and the lower priority forestry issues may in practice be given when dealt with in a larger program context which recognizes major agricultural or rural development objectives that fall within long-established national economic development priorities. Thus, some specific efforts in forestry may be warranted to encourage national planners and others to assign priorities for forestry development that are distinct from those already recognized for agricultural development, for example. Such specific efforts might include forestry research or other priorities as determined by the needs.

4. Use of Agricultural Extension Systems.

The Agency strongly agrees with the statement made in the second paragraph on page 28 of the Draft Report that forestry assistance activities alone cannot solve the "deforestation" problem, and that agricultural assistance leading to the adoption of more productive and sustainable farming systems by shifting cultivators must form a major part of any ultimate solution. However, the suggestion that the "channeling of more forestry assistance through established agricultural extension systems" might well be modified to recognize the difficulties inherent in such an approach. While we believe this approach should be explored at every opportunity, it will be necessary to review in each case what information and data resources, as well as adopted technologies, are available for use in agricultural extension systems without further or prior development of a country's forestry institutions. The extension service in the United States would be greatly constrained were it not able to utilize the knowledge and technologies developed by a wide range of research institutions to provide it with the information disseminated through the system.

Program designers also need to recognize those country situations in which agricultural extension organizations suffer from many of the same problems which face forestry extension organizations. Many agricultural extension organizations are seriously challenged to handle their own agricultural production responsibilities well. Moreover, the best agricultural extension efforts are normally found in rich farmland districts where a country's most valuable food production takes place, rather than with small, marginal land/hillside subsistence farmers, who themselves are not engaged with the country's major agricultural economy. On the other hand, forestry extension is most often primarily focused on the very marginal subsistence farmers who are receiving the least agricultural extension services.

In this context, the Report's recommendation to "encourage . . . staff to develop needed linkages for using the developing countries' established agricultural extension systems as a more direct and immediate vehicle for bringing improved forestry and land-use conservation practices to subsistence farmers," might be usefully broadened and expanded into two separate recommendations: the first addressing forestry's relationship to agriculture, and the second directly addressing the important role of the Agency's agricultural program in its own right.

The forestry-agriculture relationship could be separately dealt with by framing a recommendation which would encourage A.I.D. to realistically examine any opportunities consistent with local conditions and institutional constraints for utilizing established agricultural extension systems as one possible means of delivery of forestry extension services within those of its projects which are specifically directed at individual small farmers.

A second recommendation could address the need to devote greater attention to identifying ways in which agricultural programs (crop production, livestock production, farming systems, soil conservation, etc.) might serve as instruments for relieving resource use pressures and solving forestry-related problems without compromising basic agricultural improvement and food production objectives.

5. Country Commitment and Capacity to Implement and Sustain Forestry Programs.

There is a possibility that the Report's recommendation for A.I.D. to "approve only those projects in forestry and natural resource conservation that the developing countries are capable of implementing and sustaining" could be misinterpreted to mean that A.I.D. ought not to support forestry activities in countries where institutions are not capable of implementing and sustaining such activities and, instead, should provide forestry assistance only to countries where such institutional capacity already exists. The recommendation might be reframed to permit the Agency a greater degree of latitude for creating strengthened and expanded capacity within forestry institutions in less-developed countries. The Agency designs many of its forestry and natural resources projects intentionally to try to expand, stimulate, and promote greater efforts, strengthened capacity, and higher priorities for forestry-related programs and management.

The Agency agrees with the second paragraph on page iv of the Draft Report which describes the forest services found in many less developed countries as "fledgling organizations" that frequently do not have the strong "financial and political support of their governments" and do not have strong "extension service capability." However, the Agency's current portfolio of forestry projects must be viewed as only a first generation of assistance interventions, in many cases building on nascent host country concerns in this area. At this early date, confident or certain prediction of the ultimate capacities and degree of commitment within developing countries cannot be made.

6. Program Implementation Difficulties.

APPENDIX I

The Draft Report recommendations to "direct appropriate officials to reassess the implementation problems that are delaying some forestry projects and take actions to bring the projects' scope of activities more in line with the countries' level of commitment and capabilities" might be adjusted to offer specific comments on the need to recognize that longer timeframes for implementing forestry projects may be required to achieve the desirable capacity expansion aspects of many of A.I.D.'s forestry-related assistance projects. Extending life-of-project (LOP) planning beyond the normal 5-6 year horizon of most A.I.D. projects could bring the scope of activities more in line with a country's realistically assessed current and future expanded levels of commitment and capabilities. This would not imply that currently implemented projects should be scaled back, particularly in view of the Agency's commitment and the Congressional mandate to build institutional capacity in the forestry area in developing countries.

7. Problems Stemming from Activities of Shifting Cultivators.

The Draft Report could be interpreted to suggest that forestry assistance activities be the primary vehicle for addressing the problems arising from shifting cultivation. However, these problems necessarily require the vigorous attention of agriculturalists, rural development specialists, and natural resources management experts. Most importantly, the issues related to the activities of shifting cultivators require the engagement of policy makers in the developing countries whose concerns in this area go far beyond forestry alone.

Most of the important negative effects on the natural resource base that have now come ordinarily to be associated with the term "deforestation," such as heavy erosion and sedimentation, come about as a result of poor and unsustainable agricultural cropping practices (particularly shifting cultivation) associated with the removal of vegetative cover, poor livestock grazing practices and poor fuelwood harvesting practices. It is important to recognize that these contributory causes of deforestation frequently occur in the absence of any forest production, fire management, and woodland management programs, which are the traditional areas of responsibility for the forester.

The Agency's forestry assistance efforts are being carried out in relation to, and in close association with, many other assistance activities in intensive agricultural food crop and livestock production, agricultural soil and water conservation and management, alternative and renewable energy production and energy conservation, and rural development. These other non-forestry development activities ultimately will have the most significant impact on the problems arising from shifting cultivation, especially those dealing with deforestation.

AID/ST/ENR:8/26/82



DEPARTMENT OF STATE Comptroller Washington, D.C. 20520

August 20, 1982

Dear Mr. Conahan:

I am replying to your letter of July 14, 1982, which forwarded copies of the draft report: "Reforestation and Forestry Management Activities in Developing Countries: Is U.S. Forestry Assistance Being Effectively Used?" Enclosed are the Department of State's comments.

We understand that AID intends to propose a meeting with the GAO to review the draft in-dept. The State Department is ready to participate in such a meeting and to review any subsequent revised draft report. The Bureau of Economic and Business Affairs and the Bureau of Oceans and International Environmental and Scientific Affairs are the appropriate offices to be included in any future discussions.

We appreciate having had the opportunity to review and comment on the draft report. If I may be of further assistance, I trust you will let me know.

Sincerely,

Lorin W. Jurvis,
Acting

Enclosure:
As Stated.

Mr. Frank C. Conahan,
Director,
International Division,
United States General Accounting Office,
Washington, D.C.

GAO Draft Report, "Reforestation and Forestry Management Activities in Developing Countries: Is U.S. Forestry Assistance Being Effectively Used?"

- 1. The principal findings of the study are important and supportable; namely, that:
 - o AID projects should be carefully tailored to match country capabilities and commitments;
 - o AID should give greater attention to integrating its forestry projects directly into agricultural and rural development programs as a more effective way of addressing the problem of deforestation caused by subsistence agriculture.
 - o Improved donor coordination is necessary at both the country and international levels; and,
 - o State and Treasury should work through their representatives to relevant international organizations to promote higher priority to forestry problems.
- The report could be strengthened, however, by clarification and expanded treatment of several key issues elaborated below.
- 3. Host Country Commitment: The report fails to recognize adequately the extremely rapid growth of worldwide concern about forest loss and management that has taken place over the past 3-4 years—in many cases expressed at the Presidential level. This is reflected in recent logging bans in, e.g., the Philippines; new public education campaigns to preserve and plant trees in, e.g., Kenya; and initiation of new programs on agroforestry, watershed rehabilitation, community forestry, etc., by numerous developing country governments and international organizations.

This veritable explosion of interest is important because it raises (still unanswered) questions about whether the ascribed lack of government commitment to reforestation is static and will continue to be modest, or whether there has been insufficient time yet for developing country institutions and financing mechanisms to respond. Clearly a lag-time is involved; and the quite recent manifestation of greater policy-level commitment by developing country governments (post-1978) suggests that an increased national-level program response may only now be emerging. The point is that the report implies that the developing countries don't care as much as we do; we believe that the timing of the study is such that the selected case study approach may have missed a rapidly changing situation.

4. The U.S. (AID) Role: The report treats only indirectly a key issue for U.S. forestry assistance, namely...What unique role should/can the U.S. (and AID) play in this field? In its 1980 report to the President, the U.S. Interagency Task Force on Tropical Forests recommended that AID be a stimulus and a catalyst for improved forest management by carrying out carefully selected activities within (and supportive of) the broad array of international organizations and national agencies also active in the field.

If this stimulating/catalytic role is accepted, then it is not enough for AID to establish what the national commitment and institutional capabilities of a country happen to be at the moment and then tailor its projects accordingly. Rather, the projects should be designed to stimulate and promote higher priority for forest management within the particular country...to make the policymakers and institutions do more. Clearly, defining the optimum level of AID involvement to accomplish this is a difficult feat; and no one wants to see projects fail because either the country or AID is over-extended. On the other hand, the recent Congressional directives to AID and current Executive Branch policy call for the U.S. to play an aggressive, awareness-raising and promotional role in the tropical forest management area...and not merely to respond to the institutional capability and attitude which happen to exist at the present time.

On a related point, the report should give greater attention to the fact that AID is only one of many institutional "players", and cannot be expected to do the job alone (nor should its performance be evaluated in a vacuum). On page 25, e.g., there is a section headed "Fuelwood Projects Do Focus on Alleviating a Major Cause of Deforestation But Will Not Satisfy Increasing Energy Demands". This title and ensuing discussion seem to suggest that AID's fuelwood projects will not meet world demand. Obviously they are not intended to do so, but rather to supplement the work of the IBRD, FAO, et.al., and possibly be devoted to pilot projects or innovative approaches that can be picked up and applied by the IBRD and FAO. However, any "special" role that AID should be playing in the fuelwood or other areas is unfortunately not addressed in the study.

AID should rely more on national agricultural extension systems to pursue near term forest management objectives (in lieu of attempting to strengthen and use the weaker forestry institutions) is well founded. However, the report should recognize that efforts in both areas are needed, and that AID can (and should) contribute to both. It would also be useful to recognize that the bureaucracies of most international organizations and LDC governments require that "forestry" projects be administered by designated forestry departments,

...entities which are too often entirely separate from (and competitive with) their agricultural counterparts. Also, there are some high priority forest management problems that are not directly linked to agricultural systems, and thus must be addressed by AID working through other than indigenous agricultural institutions.

- 6. Coordination at the International Level (pp. 49-57): Several statements appear in this section that are factually incorrect, or otherwise in need of revision:
 - o The discussion of Sahel forestry (pp. 49-50) is confusing and (if understood correctly) surprising. While CDA is the focus of attention, the Club de Sahel and CILSS programs are those which would appear to be most relevant. They should also be of considerable interest because the Sahel program, including the forestry component, was designed to be a model for sound donor coordination. Given the time, planning and funding that has gone into the Sahel program, largely through the Club and CILSS, the report should provide some analysis of the program.
 - o At the bottom of pg. 50, there is a statement that..."In the absence of host country assumption of the leadership role, it has been suggested by the U.S. Department of State that the Food and Agriculture Organization of the United Nations should fill this need." The same thought appears on page 56, paragraph 3. This is incorrect, and misinterprets what the State Department has been pursuing in response to the policy recommendations of the U.S Interagency Task Force on Tropical Forests.

We see the need for coordination mechanisms at two levels. At the country level, the UNDP, through its "Resident Representative", should take the lead for donor coordination of forestry activities as a natural part of its broader mandate. In addition to in-country projects, however, there is also an array of forestry-related activities of a global nature being financed by numerous international organizations, including FAO, UNESCO, UNEP, IBRD, UNITAR, ICRAF, UNCTAD, WHO, et.al. These activities include, e.g., pilot projects on monitoring and plantation forestry, education and training programs, and research studies on tropical biology, climate relationships, forestry practices and a spectrum of other subjects. It is this array of non-country-specific activity that risks overlap and duplication, and thus requires coordination. It is the U.S. position that the FAO should assume responsibility for coordination at this level (i.e., the international). Thus, we have not accepted the FAO argument (bottom of page 51) that FAO shouldn't attempt to coordinate at the international level because the LDCs will see this as

"paternalism". We are asking FAO to coordinate an entirely different type of forestry activity; and our recent survey of developing country attitudes about FAO's proper coordinating role indicate broad-based support for our position. In fact we have not encounterd the FAO concern anywhere else.

The statement in the first paragraph on page 51 is therefore incorrect, as is the opening sentence of the second paragraph. The State Department has not proposed an FAO coordination role as described (i.e., "to identify the most critical countries and the most urgent forestry tasks, then to orchestrate the international donor effort for resolution"; and "in coordinating forestry development assistance in developing countries").

- o Also, on page 51, paragraph 1, reference is made to a \$10 million U.S. contribution to the FAO for coordination. This is incorrect. The proposal was for \$10 million to support U.S. participation in the UN Associate Experts Program, which would enable a number of young U.S. professionals to work on FAO forestry projects...not to support central FAO coordination. Our contribution to improved central coordination has been the detail last year of a senior U.S. Forest Service employee to the FAO forestry Department in Rome.
- o The reference in paragraph 2, page 51, should be to "the joint FAO/UNEP/UNESCO (not UNDP) Second Experts Meeting..." The associated recommendation of that meeting was not for FAO to "restructure its organization...for coordinating donor forestry activities". It was rather that the existing FAO Committee on Forestry Development in the Tropics be expanded in membership, and its terms of reference modified, to enable it to carry out a central review and coordination role.
- o The middle paragraph on page 7 should be corrected to show that the contractor for the Department of State study was the University of Washington, and not Washington State University.
- 7. Macro-Economic Problems: It would be useful to highlight the points made throughout the draft that AID maintain its project review mechanisms to take into account changed macro-economic circumstances, e.g. deteriorating economic situation in the recipient country which impacts on the local funds available for a particular project. We endorse the view that a project may need to be restructured or reduced in scope depending upon the country's general economic situation.

AAB for EC Elinor G. Constable

Elinor G. Constable
Deputy Assistant Secretary
for International Finance
and Development

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